

A Giant Weevil

Phaeophanus turbotti n. sp.

From the POOR KNIGHTS ISLANDS

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The giant weevil described here was collected by Mr. E. G. Turbott during a visit to the Poor Knights Islands in November, 1940. Comparison of the material with the literature on the New Zealand members of the subfamily showed that it belonged to the endemic genus *Phaeophanus* Broun and was closest to *P. o'connori* Broun from Stephen Island. Through the courtesy of Mr. J. T. Salmon, of the Dominion Museum, specimens of *P. o'connori* collected at the same time as the type specimens (Stephen Island, 20/9/16, O'Connor collection) were made available for study, and the Poor Knights material was then seen to represent a new and easily separated species. The species is named in honour of the collector and is described below.

Family CYLINDRORRHININAE.

Genus *Phaeophanus* Broun, 1886.

1886. New Zealand Journal of Science 1, 431.

Phaeophanus turbotti n. sp.

Female: Length 30 mm.

Derm black, obscured by squamiform setae on the sides and legs, but more visible dorsally, punctured, the setae arising from the punctures also squamiform and much larger; fawn, a brown patch on postocular lobes, others laterally near the margin of apical declivity and on the basal portion of the ventral prothorax; head and rostrum mixed with brown, the dorsum of prothorax and elytra sparsely brown with a few patches of fawn, a transverse fawn band at midway on the elytra; apical declivity fawn; legs with much brown, especially on the basal two-thirds of the femora.

Rostrum from apex of vertical marginal keel to the eye, five-sixths the length of and one-quarter the width of the thorax; from mandible to apex of keel, one-half the length of and one-half the width of the thorax; dorsal surface broadly excavated on basal two-thirds, deepest apicad where the excavation produces two pronounced vertical marginal keels, the excavation gradually shallowing basally and terminating in a slight depression

just in front of the level of the eyes; apical dorsal third flat and set at an obtuse angle to the rest of the dorsal surface of rostrum. Antennae inserted laterally in the apical expansion, the scape not quite attaining the eye; the funiculus and club together slightly longer than scape, the two basal joints elongate and individually twice as long as each of the remaining five, which are rounded; club four-segmented, twice as long as wide, velvety, pointed at apex; scape and funiculus bear many scattered hairs about as long as the third joint of the funiculus. Scrobes open, deep, visible from above in the expanded apical portion of the rostrum, shallowing basally and turning on to the ventral surface to terminate in front of the lower level of the eyes.

Eyes oblique, flat, placed laterally, between three and four times as deep as wide, truncate in front, slightly rounded behind.

Thorax, excluding the well developed postocular lobes, but little longer than greatest width, rectangular, widest in apical half, about one-sixth narrowed in basal two-fifths, here nearly parallel-sided, contracted in apical sixth to slightly less than the width of the base; dorsal surface flattened, the apical third with a slight median carina; a nodosity at midway on either side of the median line, these separated by less than the length of the median carina; a slightly raised ridge behind each nodosity, these convex towards each other and nearly attaining the base; at median basal third a slight nodosity is apparent; dorso-lateral margins well defined in basal half, extended into apical half, and here raised, the raised portions terminating at about their own length from the front margin; at the margin of fawn and brown, in apical half, laterad of, and parallel to the raised dorso-lateral margins there is a ridge with a pronounced nodosity at one-sixth from the front margin and from there sloping to the postocular lobes; the base straight, the apex anteriorly curved.

Base of the elytra indented between fifth and third interval and from here rounded to the minute scutellum; base slightly wider than base of thorax; widest at two-thirds and here nearly twice the width of the base, the disc slightly flattened, convex from base to apex, the apical declivity pronounced; punctures large and on dorsal surface placed in shallow craters, the confluence of these giving a very uneven aspect to the elytral surface; surface depressed near the scutellum, and here with scattered granules mainly on the first two elytral intervals, a very few to, but not beyond the fifth interval, and apicad not much beyond the pronounced discal nodosity of the third interval; third interval slightly and irregularly raised, with a pronounced nodosity at about one-sixth from base and a larger one at the commencement of the apical declivity; fourth interval roughened, but not raised, a few granules on basal sixth, slightly depressed from midway to the margin of the apical declivity; fifth outwardly curvate basally, raised, rugose, prominently peaked from midway, the apical nodosity placed beyond that of the third and twice its size; sixth not reaching the base, slightly raised but not rugose on apical half, with a few prominent peaks beyond midway and turning downwards to terminate below the apical

nodosity of the fifth interval; remaining intervals flat in the lateral aspect, the seventh, ninth and tenth with slight and successively smaller nodosities at the margin of the apical declivity, the eighth appearing depressed at the apical margin; elytral suture distinct, the margins raised slightly from the dorsal margin of the apical declivity to the apex.

Front coxae contiguous, the middle pair narrowly, the hind, widely separated. With five visible ventral segments, the first large and produced between the hind coxae to the level of their anterior margin, the second similarly large, equal to the length of the first behind the coxae; the suture of one and two anteriorly curvate; three and four subequal, small, together not equal to two, their sutures distinct, fifth smoothly rounded to apex, as long as two in the median line, raised on the disc, pronouncedly depressed at apex and transversely wrinkled on apical two-thirds.

Legs normal, femora clavate, ventrally restricted near apex, the posterior pair slightly larger than others; the tibiae of about equal length, the anterior pair slightly curved, and all with a small blunt spine ventrally at apex; corbels open, single; tarsi normal, one and two cordate, the first larger than the second, the third prominently bi-lobed, all with dense hairy pads on the lower surface, the fourth elongate and equal to one and two taken together, the claws plain, curved and well developed.

Male: Length 25 mm.

With the characters of the female, but differing as follows: the rostrum less expanded at apex. the pitting of elytra less evident and the fifth ventral segment shorter, truncate at apex, and only slightly depressed.

Type locality: The island Aorangi, of the Poor Knights group.

Material examined: The holotype female and allotype male so labelled and with the following data: "Aorangi Island, Poor Knights group. 23-29 November, 1940. E. G. Turbott." Both are in the collections of the Auckland War Memorial Museum.

The genus *Phacophanus* Broun now comprises six described species, and from those previously described the new species *P. turbotti* may be distinguished as follows: From *P. inornatus* Broun and *P. lituratus* Broun by having the apical nodosity of the fifth elytral interval larger than the nodosity of the third; from *P. similis* by its size and the absence of nodosities on the seventh elytral interval; from *P. rugosus* Broun by its size and the deep dorsal hollowing of the rostrum, and from *P. o'connori* Broun by the greater development of the vertical dorsal flanges of the rostrum, the details of the structure of the thorax and the absence of pronounced nodosities on the seventh elytral interval.